

# **EXHIBIT D**

UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION

Dr. JOSEPH F. KASPER, Individually and on	)	
Behalf of All Others Similarly Situated,	)	
Plaintiff,	)	
	)	
vs.	)	No. 3:15-cv-00923
	)	(Consolidated)
	)	JUDGE CAMPBELL
	)	MAGISTRATE JUDGE NEWBERN
AAC HOLDINGS, INC., et al.,	)	
Defendants.	)	

**EXPERT REBUTTAL REPORT OF CHAD COFFMAN, CFA**

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## I. INTRODUCTION

1. On October 18, 2016, I submitted an expert report in this matter (the “Coffman Report” or my “Report”)<sup>1</sup> in which I opined on the efficiency of the market for AAC Holdings, Inc. (“AAC” or the “Company”) common stock (“AAC Common Stock”) during the Class Period.<sup>2</sup> In that Report, I concluded that the market for AAC Common Stock was efficient during the Class Period and that damages could be calculated on a class-wide basis.

2. Following the submission of my Report, counsel for Lead Plaintiffs provided me with the Expert Report of Paul A. Gompers (the “Gompers Report”) in support of Defendants’ Memorandum of Law in Opposition to Plaintiff’s Motion for Class Certification, and asked me to review and respond to the Gompers Report’s contentions that (1) the Class Period should not extend beyond July 29, 2015; (2) AAC’s stock price change on July 30, 2015 does not support the existence of a price impact associated with the corrective disclosures; and (3) I have not articulated a class-wide damages methodology that is consistent with Plaintiffs’ theory of liability.<sup>3</sup> My responses to the Gompers Report are set forth in this document (the “Coffman Rebuttal Report” or “Rebuttal Report”).

3. In formulating my opinions set forth in this Rebuttal Report, I have relied upon the analysis already described in my Report as well as knowledge, experience, and formal training in economics, finance, and statistics in addition to the allegations and facts set forth in this lawsuit. In performing the analyses set forth in this Rebuttal Report, I also considered: (1) the Gompers

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<sup>1</sup> Unless otherwise defined here, all capitalized terms shall have the meanings given to them in the Coffman Report.

<sup>2</sup> The putative Class Period identified in the Consolidated Class Action Complaint for Violations of the Federal Securities Laws (“Complaint”) is from October 2, 2014 through August 3, 2015 (Complaint ¶ 2).

<sup>3</sup> Gompers Report ¶¶ 24-26, 39.

Report; (2) sworn testimony from Dr. Gompers in a deposition taken on January 23, 2017 (the “Gompers Tr.”); and (3) other relevant materials and information. All of the materials that I relied upon and considered in reaching my opinions in this Rebuttal Report are identified in the attached **Appendix A** and a similar Appendix to my opening Report. My qualifications, curriculum vitae, and rate of compensation were detailed in my prior Report and I do not repeat them here.

4. In summary, nothing in the Gompers Report or in his deposition testimony disturbs my opinion that the market for AAC Common Stock was informationally efficient during the Class Period, or that economic damages in this matter can be calculated and quantified subject to a common approach and methodology consistent with Plaintiffs’ theory of the case and applied class-wide. Furthermore, there is clear evidence of price impact in this case. Dr. Gompers’ opinion that no such evidence exists simply ignores the relevant facts.

## **II. SUMMARY OF OPINIONS**

5. In my prior Report, I empirically analyzed a total of nine factors to evaluate the market efficiency of AAC Common Stock, all of which supported a finding of market efficiency (citing factors from *Cammer v. Bloom* and *Krogman v. Sterritt*).<sup>4</sup> Dr. Gompers does not address any of my analyses or conclusions regarding market efficiency for AAC Common Stock. Thus, my finding that the market for AAC Common Stock was efficient during the Class Period remains unchallenged.

6. Moreover, Dr. Gompers does *not* dispute that I conducted a proper and reliable event study (in contrast, Dr. Gompers performed no such event study). In particular, he does not dispute that: (i) I properly controlled for market and industry effects; (ii) my use of a rolling

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<sup>4</sup> Coffman Report § VII.

regression model takes into account changes in AAC's volatility and relationship to the market and industry controls over time; or (iii) that I properly identified the days on which AAC Common Stock exhibited statistically significant returns during the Class Period. In fact, he relies upon my event study in forming his own affirmative opinions.<sup>5</sup>

7. Dr. Gompers' opinion that the alleged misrepresentations and/or omissions had no impact on AAC's market price ignores economic evidence that the release of corrective information had a statistically significant impact on AAC's stock price.<sup>6</sup> Once the confounding positive earnings information released concurrent with the disclosure that AAC was indicted for murder as a result of an ongoing investigation is properly controlled for, there is clear economic evidence of price impact.<sup>7</sup>

8. More specifically, Dr. Gompers claims that the observed change in market price of AAC Common Stock in response to the news of the indictment does not support the existence of fraud-related price impact because there was not an overall statistically significant stock price decline on July 30, 2015.<sup>8</sup> This opinion is fundamentally flawed because Dr. Gompers fails to address the obvious confounding positive earnings information released contemporaneously with the indictment. By simply looking at the statistical significance of the overall price reaction, Dr.

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<sup>5</sup> See Gompers Report ¶ 33: "My use of Mr. Coffman's model for the purpose of assessing Plaintiffs' class-certification arguments should not be construed as an endorsement of his event-study methodology."

<sup>6</sup> The corrective information revealed on July 29, 2015 includes the revelation of the indictment itself, the ongoing DOJ investigation, and the resignation of Menz. For ease of exposition, I will refer to this information collectively as the "indictment" or "corrective information." In a later section, I specifically address why Dr. Gompers' assertion that the corrective information is limited to the existence of the DOJ investigation is inconsistent with Plaintiffs' claims and incorrect.

<sup>7</sup> In fact, I understand Defendants specifically moved the timing of their positive earnings announcement to coincide with the revelation of the indictment.

<sup>8</sup> Gompers Report ¶¶ 6, 33-34.

Gompers fails to consider that the negative price impact related to the indictment was offset by the better-than-expected quarterly earnings results and positive earnings guidance, which the Company concurrently disclosed along with the news of the indictment. Dr. Gompers acknowledges the presence of this confounding information, but does nothing to account for it or use the tools of financial economics to analyze it.<sup>9</sup>

9. Contrary to Dr. Gompers' lack of analysis and faulty conclusion, after applying an empirical analysis based on well-accepted financial economic principles, I find strong economic evidence of a statistically significant price impact associated with the disclosure of the allegedly corrective information released on July 29, 2015.

10. As a result of this finding, Dr. Gompers' additional claim that "without a statistically significant stock price decrease...Mr. Coffman has no credible means of employing an event study to assess class-wide damages" is incorrect and baseless.<sup>10</sup> Disaggregation of the positive earnings information allows one to estimate the price impact of the corrective information. Thus, nothing in the Gompers Report disturbs my opinion that damages can be calculated on a class-wide basis in the manner described in my Report.<sup>11</sup>

11. Dr. Gompers also asserts that the disclosure of the indictment was "over disclosure"<sup>12</sup> of the alleged misstatements and omissions because he mischaracterizes Plaintiffs claims in this matter by suggesting the concealed information as *only* the existence of the DOJ

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<sup>9</sup> Dr. Gompers testified that he is unaware of a way to disentangle the reaction. *See* Gompers Tr. 40:16-40:25.

<sup>10</sup> Gompers Report ¶¶ 6, 43.

<sup>11</sup> Coffman Report ¶¶ 73-74.

<sup>12</sup> Gompers Report ¶13.

investigation with no expectation of whether it would lead to an indictment or not.<sup>13</sup> The Complaint, however, alleges that the Company knew as early as August 2013 (prior to the start of the Class Period) that the investigation would likely lead to criminal charges (an indictment). Therefore, the disclosure of the investigation, indictment, and the Menz resignation represents a partial revelation of the very information that was alleged to have been withheld and Dr. Gompers has no economic basis to assert otherwise. As a result, Dr. Gompers' entire line of argument suggesting that focusing on the price movement observed upon the release of the corrective information is somehow not relevant to price impact or an assessment of the artificial inflation per share is erroneous and irrelevant.

12. Finally, Dr. Gompers' dismissal of the additional statistically significant stock price decline on August 4, 2015 is erroneous and based on too narrow a view of Plaintiffs' claims. On August 4, 2015, a report by *Bleecker* published on *Seeking Alpha* further disclosed new information regarding details of the indictment and the history of wrong-doing at AAC, including seven additional previously undisclosed deaths at other AAC treatment facilities as recently as 2014,<sup>14</sup> which Plaintiffs allege is corrective of the alleged misstatements and omissions. Dr. Gompers does not dispute that there was a statistically significant stock price decline in reaction to the allegedly corrective information. Therefore, his opinion is entirely dependent upon his own narrow construction of Plaintiffs' claims.

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<sup>13</sup> See Gompers Report ¶ 9. "Plaintiffs claim that AAC knew about the California DOJ investigation into the death of Mr. Benefield and misled investors by failing to disclose the existence of the investigation during the purported class period. Considering that the Consolidated Complaint alleges only that AAC misled the investment community about the existence of an investigation by the California DOJ, any analysis of the alleged misstatements, omissions, and corrective disclosures must necessarily focus on how these statements (or omissions) relate to Plaintiffs' single allegation."

<sup>14</sup> Complaint ¶¶ 131-133.



13. The remainder of this report is organized as follows: **Section III** briefly describes relevant opinions and analyses from my Report which are not disputed by Dr. Gompers. **Section IV** demonstrates that once confounding information is considered, the disclosure of corrective information resulted in a statistically significant negative price reaction on July 30, 2015, thus demonstrating evidence of price impact. In **Section V**, I describe why Dr. Gompers' characterization of Plaintiffs' claim as simply a failure to disclose an investigation is incorrect, and even if he were correct, it still does not disturb the evidence regarding price impact or the ability to calculate damages on a class-wide basis. **Section VI** describes how Dr. Gompers does not dispute that there was a statistically significant stock price decline on August 4, 2015 when Plaintiffs assert additional corrective information was revealed. Therefore, Dr. Gompers' opinion that the Class Period should end on July 29, 2015, and that the price reaction on August 4, 2015 does not provide evidence of price impact, relies entirely upon his own mischaracterization of Plaintiffs' claims.

14. I reserve the right to amend this report to reflect new information that becomes available to me in light of the discovery process and/or future rulings from the Court.

### **III. DR. GOMPERS DOES NOT DISPUTE THAT AAC COMMON STOCK TRADED IN AN EFFICIENT MARKET OR THAT I PERFORMED A VALID AND RELIABLE EVENT STUDY**

15. Dr. Gompers does not dispute that my empirical analysis of the nine well-established factors supports a finding of market efficiency throughout the entire Class Period.<sup>15</sup> Indeed, his use of my event study to analyze price impact implicitly assumes the presence of an efficient market.

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<sup>15</sup> Coffman Report § VII.

16. Within the context of analyzing the efficiency of the market for AAC common stock, I constructed an event study.<sup>16</sup> This event study evaluates the extent to which price movements of AAC common stock can be explained by market and industry factors and whether the remaining company-specific return is statistically significant. Dr. Gompers does not offer any criticism of my regression specification or analytical results. Elements of my analysis that Dr. Gompers did not challenge include: (i) my selection of the estimation window used to perform the event study regression; (ii) my selection of market and industry indices for which to control; (iii) my identification of earnings announcement days; (iv) my choice of event window; (v) how I calculated the unexpected firm-specific return on each day; and (vi) whether each day exhibited a statistically significant return.<sup>17</sup> In fact, Dr. Gompers relies upon my event study as a basis for his own affirmative opinions.<sup>18</sup>

**IV. CONTRARY TO DR. GOMPER'S CLAIM, THERE IS A STATISTICALLY SIGNIFICANT NEGATIVE PRICE IMPACT ASSOCIATED WITH THE JULY 29, 2015 DISCLOSURE OF THE DOJ INVESTIGATION, INDICTMENT, AND RESIGNATION OF MENZ (COLLECTIVELY THE "INDICTMENT")**

17. After market hours on July 29, 2015, AAC disclosed allegedly corrective news that it was under investigation by the DOJ, had been indicted for murder, and that as a result accepted the resignation of Company President and Board Member Jerrod Menz.<sup>19</sup> The company also announced contemporaneously that its quarterly earnings greatly exceeded the market's

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<sup>16</sup> Coffman Report ¶¶ 44-52.

<sup>17</sup> Gompers Report ¶ 6.

<sup>18</sup> Gompers Report ¶¶ 25, 30, 33-34, 38, 39.

<sup>19</sup> "AAC Holdings, Inc. Issues Statement on California Department of Justice Actions," *Business Wire*, July 29, 2015, 4:53 PM.

expectations and increased its earnings guidance for the full year.<sup>20</sup> As a result of this combination of positive and negative news, my event study demonstrated that the price of AAC's common stock *declined* by 3.67% on July 30, 2015 (after controlling for market and industry factors).

18. Dr. Gompers claims that AAC Common Stock's price change in response to the news released after market hours on July 29, 2015 does not support the existence of fraud-related price impact because the overall 3.67% decline in AAC Common Stock was not statistically significant.<sup>21</sup> This opinion is fundamentally flawed because Dr. Gompers fails to address the obvious confounding positive earnings that was contemporaneously released.<sup>22</sup> By simply looking at the statistical significance of the overall price reaction, Dr. Gompers fails to consider that the negative price impact related to the corrective information was offset by the better-than-expected quarterly earnings results. Dr. Gompers acknowledges the presence of this confounding information,<sup>23</sup> but does nothing to account for it or use the tools of economics to analyze it.<sup>24</sup> Contrary to Dr. Gompers lack of analysis and erroneous conclusion, after examining and valuing the various pieces of information that were disclosed to the market on this day, I find strong economic evidence of price impact associated with the corrective information.

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<sup>20</sup> "AAC Holdings, Inc. Reports Second Quarter 2015 Results," *Business Wire*, July 29, 2015, 4:54 PM.

<sup>21</sup> Gompers Report ¶¶ 6, 33-34.

<sup>22</sup> In fact, I understand Defendants specifically moved the timing of their positive earnings announcement to coincide with the revelation of the indictment.

<sup>23</sup> Gompers Report ¶ 32.

<sup>24</sup> At deposition, Dr. Gompers testified that he was unaware of a way to disentangle the price reaction. *See* Gompers Tr. 40:16-40:25.

19. The corrective information disclosed on July 29, 2015 was released after market hours on July 29, 2015 when, at 4:53 pm, a *Business Wire* article revealed to the market the Grand Jury indictment asserting charges against subsidiaries of AAC and a few of its former employees as a result of an ongoing California DOJ's investigation into the 2010 death of a client.<sup>25</sup> The article also revealed that its President, Defendant Menz, had voluntarily stepped down to address the charges made by California DOJ:

Three of the individuals named in the case are former employees of AAC. Of the two current employees, Jerrod Menz, the Company's President and a member of the Board of Directors, has voluntarily stepped down from those roles to address these charges. Meg Dean, Operations Director of the Company's residential treatment facility in San Diego, will remain in her current role. Both are valuable members of AAC's team and will be defended vigorously along with the other individuals charged.<sup>26</sup>

20. One minute later at 4:54 pm, *Business Wire* issued a press release from AAC where the company reported strong earnings results for second quarter of 2015, which were well above analyst expectations<sup>27</sup> (i.e., EPS<sup>28</sup> of \$0.33 per share compared to analyst expectations of \$0.16 per share<sup>29</sup>) and increased its financial guidance for the fiscal year. Shortly thereafter, AAC held

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<sup>25</sup> "AAC Holdings, Inc. Issues Statement on California Department of Justice Actions," *Business Wire*, July 29, 2015, 4:53 PM.

<sup>26</sup> *Id.*

<sup>27</sup> "AAC Holdings, Inc. Reports Second Quarter 2015 Results," *Business Wire*, July 29, 2015, 4:54 PM.

<sup>28</sup> In Q1 2015 the company began announcing "adjusted" EPS in addition to GAAP EPS. The difference is that "adjusted" EPS removes the effect of certain one-time items and therefore purports to give a better measure of core earnings. Securities analysts covering AAC appropriately focus on this "adjusted" EPS when assessing the level of earnings "surprise," as do I. Therefore, the EPS figures reported herein reflect the "adjusted" EPS.

<sup>29</sup> William Blair and Avondale Partners reported consensus EPS expected for Q2 2015 as \$0.16 per share, while analysts at ValueEngine cited \$0.17 per share. Since Value Engine report was released 7/28 while William Blair and Avondale Partners released their reports on 7/29 and 7/30 respectively, and since William Blair and Avondale Partners are two analysts who consistently report on AAC during the Class Period, I rely on William Blair and Avondale Partners for the

a conference call to discuss the earnings, but did not provide additional information related to the indictment.<sup>30</sup> The following day, during trading hours at 2:00 pm, *Bloomberg* released an article titled “AAC Drops; President Indicted for Murder in Patient Death,” which provided additional detail on the indictment:

[AAC] Inc., doing business as Forterus Health Care Services, was indicted July 21 for murder and dependent adult abuse by a Calif. grand jury, according to a copy of the indictment provided by the office of California Attorney General Kamala Harris.

- Five individuals were also named in the two-count indictment, including AAC Holdings President Jerrod, who founded [AAC]; Menz resigned [yesterday]<sup>31</sup>

21. Thus, the mix of information released on July 29 and July 30, 2015 contained a mix of positive and negative information. The information revealing the California DOJ’s indictment, the voluntary resignation of President Menz and some details on the indictment charges would be expected to have a negative impact on the stock price, while the strong positive earnings results would be expected to have a positive effect on the stock, thus offsetting to some degree the negative price impact.

22. Indeed, several analysts highlighted the “phenomenal” earnings result and increased guidance as evidenced by the following excerpts:

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consensus EPS estimate. Even if I were to incorporate ValueEngine’s report, and take a mean of the three reported numbers, it doesn’t affect my analysis in any material way. *See*, “AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength,” *Avondale Partners, LLC*, July 30, 2015; “Strong Quarter as Company Firing on All Cylinders, But California Charges May Dampen Enthusiasm”, *William Blair*, July 29, 2015; “Rating and Forecast Report AAC Holdings”, *ValueEngine*, July 28, 2015.

<sup>30</sup> “AAC Holdings, Inc. Q2 2015 Earnings Call Transcripts”, *S&P CapIQ*, July 29, 2015, 6:30 PM.

<sup>31</sup> “AAC Drops; President Indicted for Murder in Patient Death,” *Bloomberg*, July 30, 2015, 2:00 PM.

- **On Wednesday, July 29 after the markets closed, AAC reported strong second-quarter results that were well above consensus expectations across the board.** Total revenue registered at \$53.8 million, an 85% year-over-year increase and above both our \$43.4 million target and the Street's \$44.4 million forecast. Adjusted EBITDA (the key profit metric we monitor for AAC) were \$14.0 million, also above our target of \$8.5 million and the consensus forecast of \$8.7 million. Lastly, the company reported adjusted earnings per share of \$0.33 that were well above the Street's \$0.16 forecast. **Given year-to-date momentum, management also raised guidance for 2015.**<sup>32</sup>
- **2Q15 Beyond Expectations.** Adj. EPS of \$0.33 in 2Q15 significantly beat both our estimate of \$0.15 and consensus of \$0.16.

**2015 Guidance Raised and Appears Conservative. Given its results in 2Q, AAC raised revenue, Adj. EBITDA, and Adj. EPS guidance for 2015 (see Figure 1).**<sup>33</sup>

23. Analysts also discussed the negative news regarding the Grand Jury indictment and the resignation of its President Menz, as can be seen from the following excerpts:

- **While the company's quarterly performance was nothing short of phenomenal, it likely will be somewhat overshadowed by the announcement of a California Department of Justice indictment** charging subsidiaries of AAC and two current and three former employees in relation to a 2010 patient death at a facility (which the company acquired via a stock purchase after the event occurred). Given the nature of the case, the company is limited in what it can say; however, we note the following: 1) the patient died of natural causes in his room (the coroner concluded the client died of hypertensive cardiovascular disease and made no finding that the death had anything to do with the client's treatment at the facility); 2) a civil case related to the death was already settled more than a year ago with no admission of liability; and 3) one of the charges is against the former facility owner and AAC board member Jerrod Menz, who the company announced has voluntarily stepped down from its board to address the charges (although he will remain at the company in a business development function). At this point, it is difficult to add more color (e.g., financial risk, etc.) but we do not believe the issue presents a major fundamental risk to the story going forward. For

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<sup>32</sup> "Strong Quarter as Company Firing on All Cylinders, But California Charges May Dampen Enthusiasm," *William Blair*, July 29, 2015.

<sup>33</sup> "AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength," *Avondale Partners*, July 30, 2015.

example, we do not believe the issue would impact the company's ability to gain licensure for its pending hospital in Aliso Viejo, California (and we note that the licensure status of the facility where the patient died was never even revoked). Still, we acknowledge that the case could remain a modest overhang on the stock until resolved (likely not for some time).<sup>34</sup>

- **CA DOJ Investigation Masks Performance.** On the call, AAC announced an investigation by the California DOJ in connection with a client's death at one of its subsidiary treatment facilities. The event in question, which occurred in July 2010, involves the death of a patient (from natural causes according to press release) who was found the morning after checking into an A Better Tomorrow treatment facility in Murrieta, CA. Two current AAC employees, including President Jerrod Menz, were named as defendants in the case. Details are limited at this stage, but the arraignment and subsequent trial will likely be scheduled in 3Q of this year.<sup>35</sup>

24. Thus, the abnormal decline of 3.67% on July 30, 2015 represents the aggregate reaction of AAC Common Stock to both the negative and the positive news. The positive news related to the \$0.17/share earnings surprise is, of course, unrelated to the fraud.<sup>36</sup> While the remainder of the news – that is, the revelation of the indictment revealing the DOJ investigation, and President Menz's subsequent resignation – are alleged to be corrective.<sup>37</sup>

25. To properly evaluate the magnitude of the price response to AAC's announcement of the indictment, one needs to first perform an analysis to control for the confounding positive

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<sup>34</sup> "Strong Quarter as Company Firing on All Cylinders, But California Charges May Dampen Enthusiasm," *William Blair*, July 29, 2015 (*emphasis added*).

<sup>35</sup> "AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength," *Avondale Partners*, July 30, 2015.

<sup>36</sup> Dr. Gompers agrees (Gompers Report ¶ 32): "It is difficult to determine the price impact of the announcement of the California DOJ indictment alone as "confounding" information, in the form of second quarter earnings and the resignation of Jerrod Menz from his position as President and member of the Board, was released at nearly the same time as the indictment."

<sup>37</sup> Dr. Gompers asserts incorrectly that Plaintiffs' claims only relate to the disclosure of the DOJ investigation and does not treat the indictment itself or the Menz resignation as corrective. This argument is addressed in the subsequent section, but does not influence whether there is economic evidence of a negative and statistically significant price response to the release of information about the investigation, indictment, and resignation on July 30, 2015.

information. The financial economic concept of an Earnings Response Coefficient, or “ERC,” provides a reasonable means to quantify the stock price reaction that is expected due to a company’s earnings results. The use of an ERC methodology to quantify the market reaction to earnings shocks is a common and accepted method in the finance literature.<sup>38</sup> An ERC quantifies the ratio of the price movement per share to the earnings surprise per share:

$$\text{Earnings Response Coefficient (ERC)} = \frac{\text{Firm-Specific Price Movement per Share}}{\text{Earnings Surprise per Share}}$$

26. For example, an ERC of 5 would imply that for every \$0.01 per share in earnings surprise, there would be a change in the stock price \$0.05 per share. Thus, an ERC reflects the sensitivity of the stock price to unexpected earnings shocks.

27. The inherent economic logic of an ERC approach is that empirical data regarding how the market has reacted to other earnings surprises provides economic evidence of how it would respond to an alternative earnings surprise. In this particular matter, there is strong and reliable empirical data from which to evaluate the magnitude of the stock price increase that might have been observed on July 30, 2015 as a result of the earnings surprise alone. Indeed, for each of AAC’s first three earnings announcements after its initial public offering (“IPO”), there were positive surprises to earnings relative to what was expected by securities analysts and statistically significant stock price increases in reaction to the earnings announcements. These events provide a reasonable and reliable sample for evaluating the magnitude of the price response that would have been expected on July 30, 2015.

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<sup>38</sup> See for example, Collins and Kothari (1989); Chambers, Freeman & Koch (2005); Kormendi & Lipe (1987); Hotchkiss & Strickland (2003); Freeman & Tse (1992).



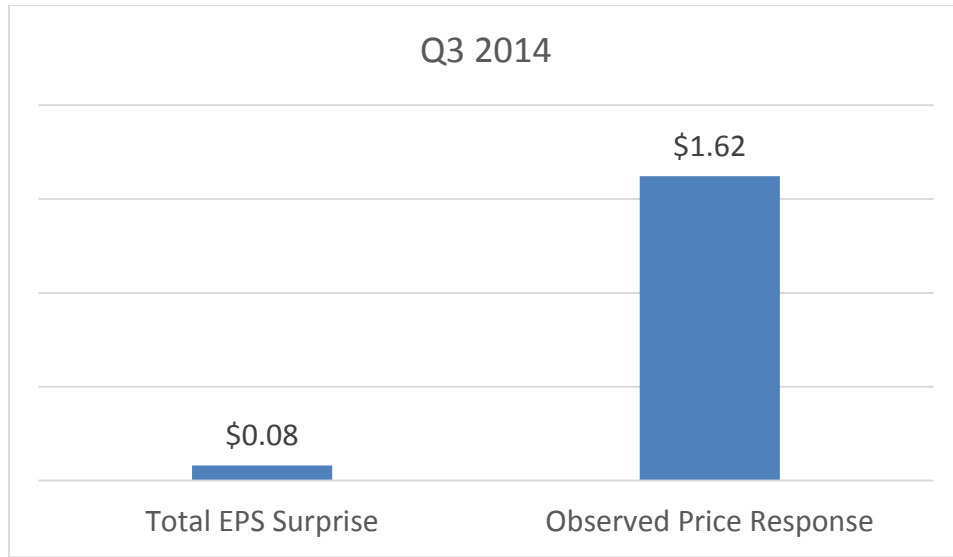
28. The table below shows that prior to its July 29, 2015 announcement, AAC Holdings had announced three separate quarterly earnings results since its IPO.

		Actual EPS	Expected EPS	EPS Surprise
Q3 2014	"AAC Holdings, Inc. Reports Third Quarter 2014 Results," <i>Business Wire</i> , November 5, 2014, 5:18 PM. <sup>39</sup>	\$0.15	\$0.07	\$0.08
Q4 2014	"AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2014 Results," <i>Business Wire</i> , February 24, 2015, 4:05 PM.	\$0.20	\$0.09	\$0.11
Q1 2015	"AAC Holdings, Inc. Reports First Quarter 2015 Results," <i>Business Wire</i> , April 29, 2015, 4:05 PM.	\$0.15	\$0.10	\$0.05

29. As the table above shows, for Q3 2014, based on analyst consensus, the market expected earnings per share ("EPS") of \$0.07 per share.<sup>40</sup> The Company exceeded expectations when it announced it achieved EPS of \$0.15 per share. This announcement yielded a positive EPS "surprise" of \$0.08 per share (actual EPS minus expected EPS). In response to this \$0.08 surprise, based on my event study, AAC Common Stock increased by \$1.62 per share on November 6, 2014, after controlling for market and industry factors (see chart below).

<sup>39</sup> In its Q3 2014 and Q4 2014 earnings results, AAC provided GAAP EPS results as opposed to adjusted EPS figures. However, in its Q3 2015 and Q4 2015 earnings results, AAC provided adjusted EPS figures for Q3 2014 and Q4 2014 respectively. The figures in the table reflect adjusted EPS. See "AAC Holdings, Inc. Reports Third Quarter 2015 Results," *Business Wire*, October 27, 2015, 5:19 PM; "AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2015 Results," *Business Wire*, February 23, 2016, 6:30 PM.

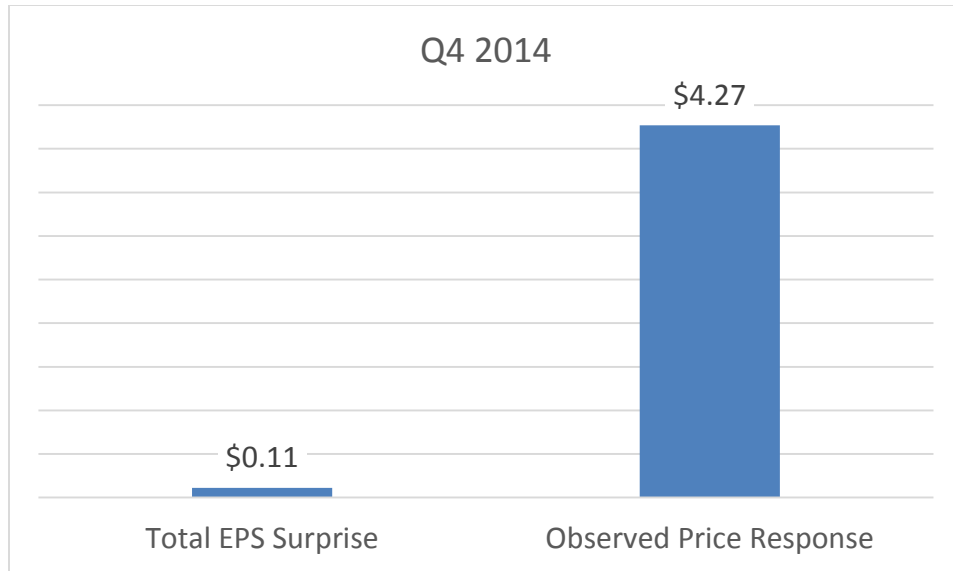
<sup>40</sup> While this discussion focuses on EPS, I show that my analysis and opinions are robust to consideration of other performance metrics focused on by analysts to evaluate the value of AAC (i.e., adjusted EBITDA and Revenue).



$$ERC_{Q3\ 2014} = \frac{\$1.62\ per\ share\ price\ change}{\$0.08\ per\ share\ earnings\ shock} = 20.27$$

30. Therefore, the implied earnings response coefficient related to this event is 20.27 (\$1.62 per share divided by \$0.08 per share). In other words, for each \$0.01 per share EPS shock, the price of AAC Common Stock increased by \$0.23 per share.

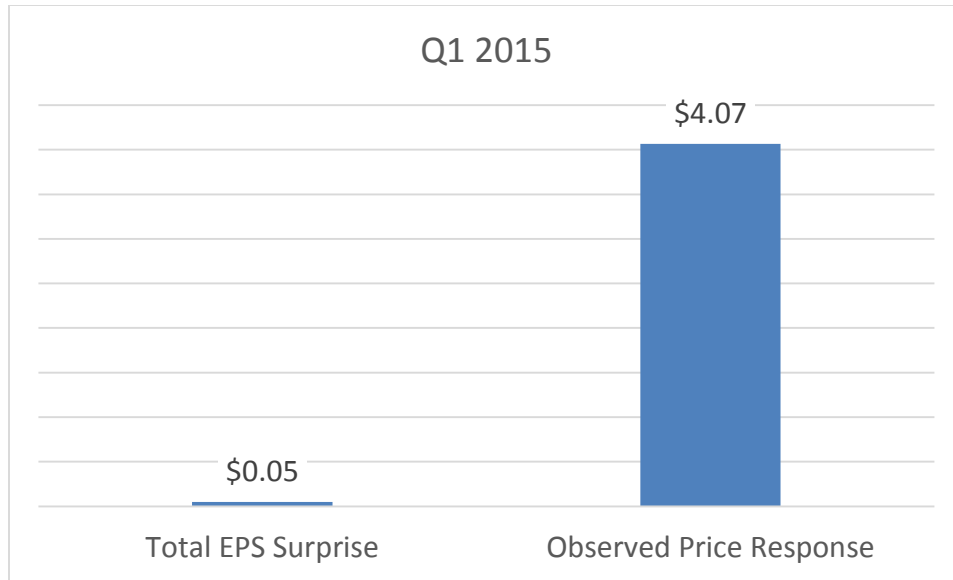
31. For Q4 2014, based on analyst consensus, the market expected EPS of \$0.09 per share. The Company exceeded expectations when it announced actual EPS of \$0.20. This announcement yielded a positive EPS “surprise” of \$0.11 (actual EPS minus expected EPS). In response to this \$0.11 per share quarterly earnings surprise, according to my event study, AAC Common Stock increased by \$4.27 per share on February 25, 2015, after controlling for market and industry factors (see chart below).



$$ERC_{Q4\ 2014} = \frac{\$4.27\ per\ share\ price\ change}{\$0.11\ per\ share\ earnings\ shock} = 38.80$$

32. Therefore, the implied earnings response coefficient related to this event is 38.80 (\$4.27 divided by \$0.11). In other words, for each \$0.01 per share EPS shock, the price of AAC Common Stock increased by \$0.38 per share.

33. For Q1 2015, based on analyst consensus, the market expected EPS of \$0.10 per share. The Company exceeded expectations when it announced actual EPS of \$0.15 per share. This announcement yielded a positive EPS “surprise” of \$0.05 per share (actual EPS per share minus expected EPS per share). In response to this \$0.05 per share surprise, according to my event study, AAC Common Stock increased by \$4.07 per share on April 30, 2015, after controlling for market and industry factors (see chart below). Therefore, the earnings response coefficient related to this event is 81.33 (\$4.07 divided by \$0.05).



$$ERC_{Q1\ 2015} = \frac{\$4.07\ per\ share\ price\ change}{\$0.05\ per\ share\ earnings\ shock} = 81.33$$

34. In other words, for each \$0.01 EPS shock, the price of AAC Common Stock increased by \$0.81 per share.

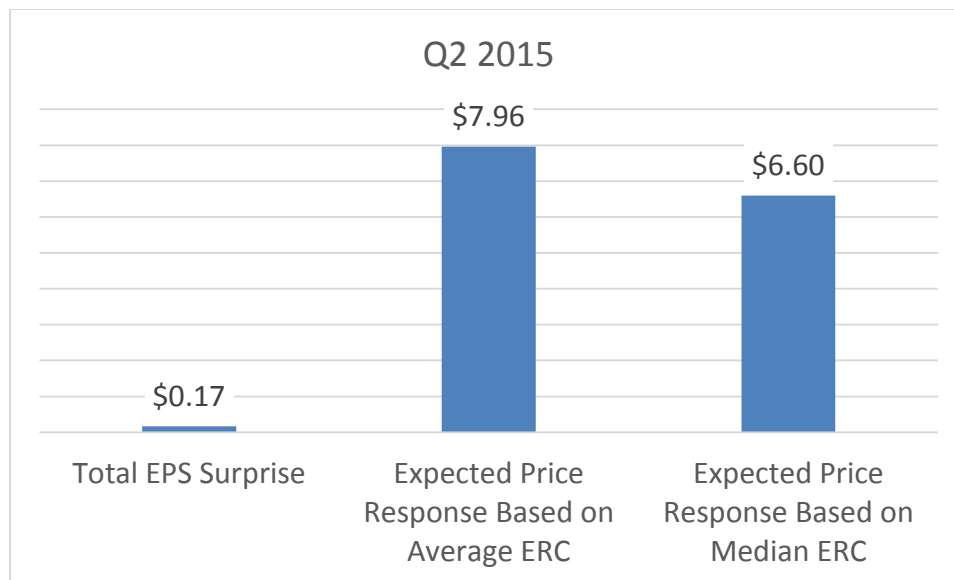
35. On July 29, 2015 (the date of the corrective disclosure), the company announced Q2 2015 EPS of \$0.33 per share while the market had expected EPS \$0.16 per share. This represents a positive surprise of \$0.17 per share, which is even larger than the positive earnings surprises on the previous three events, which themselves were each associated with statistically significant stock price increases. Therefore, the notion that there would have been a statistically significant stock price increase on July 30, 2015 but-for the disclosure of the corrective information is intuitive and empirically supported.

36. To more specifically demonstrate the expected magnitude of the stock price reaction to the positive earnings announcement on July 29, 2015 based on the prior empirical data, I separately consider using the average and median values of the previously observed

ERCs. As the table below shows, over Q3 2014, Q4 2014 and Q1 2015 the average ERC is 46.80 and the median ERC is 38.80.

	Actual EPS	Expected EPS	EPS Surprise	Abnormal Price Change	ERC
Quarterly Period	[A]	[B]	[C]=[A]-[B]	[D]	[E]=[D]/[C]
Q3 2014	\$0.15	\$0.07	\$0.08	\$1.62	20.27
Q4 2014	\$0.20	\$0.09	\$0.11	\$4.27	38.80
Q1 2015	\$0.15	\$0.10	\$0.05	\$4.07	81.33
Average ERC:					46.80
Median ERC:					38.80

37. As the chart below shows, the average ERC of 46.80 implies an expected reaction in AAC Common Stock of \$7.96 per share (46.80 multiplied by \$0.17 per share earnings surprise), while the median ERC implies an expected reaction of \$6.60 per share (38.80 multiplied by \$0.17 per share earnings surprise).



38. So, for example, relying on the \$7.96 per share positive impact related to the earnings surprise (using the mean ERC from the prior analysis), the implied negative price

reaction related to the disclosure of the investigation, indictment and Menz resignation is -\$9.39 per share.<sup>41</sup> A price decline of \$9.39 per share represents a highly statistically significant decline with an associated t-statistic of -7.58 (see Exhibit 1a). Indeed, the chance of observing a stock price movement with a t-statistic of -7.58 by chance alone is 1 in 104 billion.<sup>42</sup>

39. Exhibits 1b and 1c show that applying the same analysis to other earnings-related metrics yields qualitatively similar results. Thus, there is clear empirical support for price impact associated with the alleged misrepresentations and/or omissions.<sup>43</sup> Dr. Gompers failure to even attempt to quantify the confounding positive earnings information renders his analysis flawed and irrelevant and his conclusions incorrect.

## **V. DR. GOMPERS' OPINIONS RELY UPON A MISCHARACTERIZATION OF PLAINTIFFS CLAIMS**

40. Dr. Gompers further asserts that Plaintiffs will be unable to assess class-wide damages because the corrective disclosure on July 29, 2015 is an “over-disclosure” of the fraud.<sup>44</sup> More specifically, Dr. Gompers defines the fraud as only relating to the existence of a DOJ investigation and that the actual indictment and resignation of Menz are confounding

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<sup>41</sup> -\$1.43 per share observed price decline *minus* \$7.96 impact of positive earnings news.

<sup>42</sup> Regardless of whether median or mean is used, it implies that the stock would have increased by a statistically significant amount as a result of earnings surprise. Even if I had selected the minimums, maximums, or any other method of calculating the central tendency of the ERC, it would suggest a statistically significant price reaction. *See* Exhibits 1a – 1c.

<sup>43</sup> I have not been asked to provide a specific opinion regarding which ERC among the range of those considered is the most reliable for determining a more precise measure of the magnitude of the stock price increase caused by the earnings information or the decline caused by the corrective information. However, the empirical analysis herein establishes that even a very conservative choice supports that there was price impact associated with the corrective information and that a reasonable measure is obtainable and can be used to compute damages on a class-wide basis.

<sup>44</sup> Gompers Report ¶¶ 6, 43.

factors (in addition to the earnings information already addressed) that must be disaggregated. He therefore concludes that Plaintiffs have not provided a damages calculation that is consistent with Plaintiffs' theory of liability.

41. Dr. Gompers is wrong for several reasons. First, the entire basis of Dr. Gompers' opinion is his own narrow interpretation of Plaintiffs' claims, which are inconsistent with what is alleged in the Complaint. The Complaint alleges that from prior to the time of AAC's IPO, the Company failed to disclose that Defendant Menz (AAC's President at the time) and a subset of AAC's subsidiaries were under investigation by the California Department of Justice ("DOJ").<sup>45</sup> The Complaint more specifically alleges that the Company knew as early as August 2013 (prior to the start of the Class Period) that the investigation would likely lead to criminal charges (an indictment). This fact was directly contradicted by the Company's filings with the U.S. Securities and Exchange Commission, which affirmed that AAC Holdings was "not aware of any material pending or threatened investigations involving allegations of wrongdoing" and "not aware of any legal proceedings the outcome of which ... would have material adverse effect on our business, financial condition or results of operations."<sup>46</sup>

42. The Complaint further alleges that from the beginning of the Class Period, AAC mislead investors by failing to disclose risks to its business due to the California DOJ's investigation and the subsequent loss of its key executive, President Menz. According to the Complaint, Defendants knew this risk had already materialized as early as August 2013 when, as the investigation neared completion, the California Deputy Attorney General Hardy R. Gold said

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<sup>45</sup> Complaint ¶¶ 6-7.

<sup>46</sup> Complaint ¶ 10.

he “anticipate[d] that criminal charges would be filed.”<sup>47</sup> Yet, in the Registration Statement under “Risks Related to Our Business,” filed with SEC on October 2, 2014, the first day of the Class Period, the Company stated:

We rely on our multifaceted sales and marketing program to continuously attract and enroll clients to our network of facilities. Any disruption in our national sales and marketing program would have a material adverse effect on our business, financial condition and results of operations.

If we fail to comply with the extensive laws and government regulations impacting our industry, we could suffer penalties, be the subject of federal and state investigations and potential claims and legal actions by clients, employees and others or be required to make significant changes to our operations, which may reduce our revenues, increase our costs and have a material adverse effect on our business, financial condition and results of operations.<sup>48</sup>

43. Additionally, in the Registration Statement under “Risk Factors,” the Company had noted that loss of its key executives, including President Menz, would undermine its management expertise and would have material adverse impact on the company:

The expertise and efforts of our key executives, including our chief executive officer, president [Menz], chief operating officer, chief financial officer and general counsel, and other key members of our facility management personnel and sales staff are critical to the success of our business.... The loss of the services of one or more of our key executives or of a significant portion of our facility management personnel or sales staff could significantly undermine our management expertise and our ability to provide efficient, quality healthcare services at our facilities.<sup>49</sup>

44. Similar statements were also made in the Company’s 2014 Annual Report.<sup>50</sup>

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<sup>47</sup> Complaint ¶¶ 7, 103-107, 114, 125.

<sup>48</sup> AAC Holdings, Inc. Form 424(B) – Registration Statement, pp. 5-6, October 2, 2014.

<sup>49</sup> AAC Holdings, Inc. Form 424(B) – Registration Statement, p. 23, October 2, 2014.

<sup>50</sup> AAC Holdings, Inc. Annual Report for FYE December 31, 2014, pp. 18, 25-26.



45. Dr. Gompers' argument that the news regarding the indictment and subsequent resignation of President Menz is confounding as opposed to corrective is based upon a misreading of Plaintiffs' claims.

46. Second, even if Dr. Gompers were correct, that does not imply that the widely-accepted out of pocket damages methodology described in my prior Report could not be applied. Dr. Gompers' objections do not relate to whether the general out-of-pocket damages methodology can be applied uniformly and formulaically in this matter using common proof on a class-wide basis. Instead, his objections relate to whether certain adjustments would ultimately be necessary at the merits stage to address the alleged presence of confounding information on the corrective disclosure events. If necessary, this would require a detailed loss causation analysis, which I understand is not required at this stage of the litigation.

47. Additionally, these more detailed issues regarding loss causation (i.e., "disaggregating" the effect of confounding information) are present in virtually every securities class action matter and regularly the subject of expert discovery during the merits phase of the litigation. These loss causation issues are also potentially dependent on information obtained during discovery and are determined based upon proof that is common to all class members. For example:

48. In almost every case there is a dispute about whether the newly released information that is alleged to be corrective is confounded by other newly released, company-specific information unrelated to the fraud.

49. In almost every case there is a battle of the experts at the merits stage regarding what information is confounding and how to reasonably estimate the value of the potentially confounding information.

50. I further understand that once a loss causation analysis is performed during the merits phase of the litigation, the percentage of confounding information (if any) does not need to be measured with precision, but only needs to be a reasonable approximation based on all relevant information, potentially including information obtained in discovery. I also understand that proving loss causation only requires that the alleged misconduct be a substantial factor in causing the abnormal price changes on corrective disclosure dates, not that it be the sole factor (i.e., 100%) of the abnormal stock price decline.

51. Whatever percentage of confounding information is determined to be reasonable, it can be applied on a class-wide basis within the general damages methodology already described in my report.

52. At most, Dr. Gompers is suggesting that, in calculating the precise inflation per share that would be an input into the damages model, one would have to account for the value of certain information. In my experience, this has never been an impediment to applying the well-accepted out of pocket methodology on a class-wide basis. Nothing in the Gompers Report disturbs my opinion that damages in this matter can be calculated on a class-wide basis in the manner described in my Report.<sup>51</sup>

## **VI. AUGUST 4, 2015 PROVIDES ADDITIONAL EVIDENCE OF PRICE IMPACT**

53. On August 4, 2015, a report by *Bleecker* published on *Seeking Alpha* further disclosed new information regarding details of the indictment and the history of wrong-doing at AAC, including seven additional previously undisclosed deaths at other AAC treatment facilities as recently as 2014,<sup>52</sup> which Plaintiffs allege is corrective of the alleged misstatements and

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<sup>51</sup> Coffman Report ¶¶ 73-74.

<sup>52</sup> Complaint ¶¶ 131-133.

omissions by providing supplemental information related to the indictment. In response to this information, AAC common stock declined by 39.24%, after controlling for industry and market factors. The decline is statistically significant with a t-stat of -12.33 according to my event study.

54. Dr. Gompers does not dispute that there was a statistically significant stock price decline in reaction to the allegedly corrective information. Dr. Gompers' dismissal of the additional statistically significant stock price decline on August 4, 2015 is erroneous and based on a narrow view of Plaintiffs' claims. If the additional details and information underlying the facts that led to the indictment and the pattern of wrong-doing at AAC is deemed corrective, then Dr. Gompers' opinion is incorrect.

55. Furthermore, Dr. Gompers admits he did nothing to analyze or understand the news released August 4. When asked in deposition whether or not he disputes that the articles released moved the price, Dr. Gompers said:

***I haven't done an analysis.*** So one, I have no opinion on market efficiency. My analysis of price impact and the class period ending on the 29th is assuming that the market's efficient. ***I haven't done any analysis*** to understand what happened on or what moved the stock price on August 4th.<sup>53</sup>

56. The deposition continued as follows:

Q. Okay. So you don't have an opinion whether or not those articles had price impact on August 4th?

A. Well, price impact would assume that they were corrective. What I've gone through is showed that those articles are not corrective of the alleged misstatements or omissions. I haven't done an analysis to show or to examine what moved the stock price on August 4th, but certainly, if it was the Bleeker report, that's not corrective of the alleged misstatements and omissions.

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<sup>53</sup> Gompers Tr. 93:22-94:14 (*emphasis added*).

57. If the information released on August 4, 2015 is corrective, then Dr. Gompers has no reliable justification for opining that the Class Period should end on July 29, 2015.

Furthermore, the price reaction in AAC common stock on August 4, 2015 provides additional evidence of price impact.

58. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.



Chad Coffman

Executed on February 10, 2017.

# Exhibit 1a

## Disaggregation of AAC Common Stock's Price Movement on 7/30/2015 Based on Earnings Response Coefficients (ERC Methodology)

		Date	Quarterly Period	EPS			Abnormal Price Change	ERC
				Actual	Expected	Surprise		
				[A]	[B]	[C]=[A]-[B]	[D]	[E]=[D]/[C]
[1]		11/6/14	Q3 2014	\$0.15	\$0.07	\$0.08	\$1.62	20.27
[2]		2/25/15	Q4 2014	\$0.20	\$0.09	\$0.11	\$4.27	38.80
[3]		4/30/15	Q1 2015	\$0.15	\$0.10	\$0.05	\$4.07	81.33
[4]		7/30/15	Q2 2015	\$0.33	\$0.16	\$0.17	(\$1.43)	

		Average ERC	Median ERC	Min ERC	Max ERC
[5]	ERC Estimate	46.80	38.80	20.27	81.33
[6]	Earnings Surprise on 7/30/15	\$0.17	\$0.17	\$0.17	\$0.17
[7]=[5]*[6]	Expected Abnormal Price Movement due to Earnings Surprise on 7/30/15	\$7.96	\$6.60	\$3.45	\$13.83
[8]	Abnormal Price Movement on 7/30/15	(\$1.43)	(\$1.43)	(\$1.43)	(\$1.43)
[9]=[8]-[7]	Implied Abnormal Price Movement due to Corrective Info on 7/30/15	(\$9.39)	(\$8.03)	(\$4.88)	(\$15.26)
[10]	AAC Common Stock Price on prior trading date	\$39.07	\$39.07	\$39.07	\$39.07
[11]=[9]/[10]	<b>Implied Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-24.0%</b>	<b>-20.6%</b>	<b>-12.5%</b>	<b>-39.1%</b>
[12]	Root Mean Squared Errors (or Standard Deviation of Errors) on 7/30/15	0.03	0.03	0.03	0.03
[13]=[11]/[12]	<b>T-statistic of Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-7.58</b>	<b>-6.48</b>	<b>-3.94</b>	<b>-12.32</b>
[14]	P-value of Abnormal Price Movement due to Corrective Info on 7/30/15	0.00	0.00	0.00	0.00

### Notes:

[A] Actual adjusted EPS figures from AAC Holdings press releases. AAC reported its adjusted EPS for Q3 2014 and Q4 2014 in its earnings announcements for Q3 2015 and Q4 2015 respectively. See, "AAC Holdings, Inc. Reports Third Quarter 2015 Results," *Business Wire*, October 27, 2015; "AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2015 Results," *Business Wire*, February 23, 2016; "AAC Holdings, Inc. Reports First Quarter 2015 Results," *Business Wire*, April 29, 2015; "AAC Holdings, Inc. Reports Second Quarter 2015 Results," *Business Wire*, July 29, 2015.

[B] Consensus/street Adjusted EPS estimates cited by analysts. See, "AAC-First Look at 3Q14," *Avondale Partners*, November 5, 2014; "Solid End to First Year as a Public Company; Development Pipeline Looks Robust," *William Blair*, February 24, 2015; "Strong Start to the Year; Development Pipeline Should Drive Continued Growth," *William Blair*, April 29, 2015; "AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength," *Avondale Partners*, July 30, 2015.

[D] Coffman Event Study Results.

[8] Coffman Event Study Results.

[10] S&P CapIQ Price data.

[12] Coffman Event Study Results.

**Exhibit 1b**

**Disaggregation of AAC Common Stock's Price Movement on 7/30/2015 Based on Earnings Response Coefficients (ERC Methodology)**

			Adjusted EBITDA (millions)			Abnormal Price Change	ERC
	Date	Quarterly Period	Actual	Expected	Surprise		
			[A]	[B]	[C]=[A]-[B]	[D]	[E]=[D]/[C]
[1]	11/6/14	Q3 2014	\$6.70	\$4.00	\$2.70	\$1.62	0.60
[2]	2/25/15	Q4 2014	\$6.60	\$5.60	\$1.00	\$4.27	4.27
[3]	4/30/15	Q1 2015	\$8.20	\$6.30	\$1.90	\$4.07	2.14
[4]	7/30/15	Q2 2015	\$14.00	\$8.70	\$5.30	(\$1.43)	

		Average ERC	Median ERC	Min ERC	Max ERC
[5]	ERC Estimate	2.34	2.14	0.60	4.27
[6]	Earnings Surprise on 7/30/15	\$5.30	\$5.30	\$5.30	\$5.30
[7]=[5]*[6]	Expected Abnormal Price Movement due to Earnings Surprise on 7/30/15	\$12.38	\$11.34	\$3.18	\$22.62
[8]	Abnormal Price Movement on 7/30/15	(\$1.43)	(\$1.43)	(\$1.43)	(\$1.43)
[9]=[8]-[7]	Implied Abnormal Price Movement due to Corrective Info on 7/30/15	(\$13.82)	(\$12.78)	(\$4.62)	(\$24.06)
[10]	AAC Common Stock Price on prior trading date	\$39.07	\$39.07	\$39.07	\$39.07
[11]=[9]/[10]	<b>Implied Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-35.4%</b>	<b>-32.7%</b>	<b>-11.8%</b>	<b>-61.6%</b>
[12]	Root Mean Squared Errors (or Standard Deviation of Errors) on 7/30/15	0.03	0.03	0.03	0.03
[13]=[11]/[12]	<b>T-statistic of Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-11.15</b>	<b>-10.31</b>	<b>-3.73</b>	<b>-19.42</b>
[14]	P-value of Abnormal Price Movement due to Corrective Info on 7/30/15	0.00	0.00	0.00	0.00

Notes:

[A] Actual adjusted EBITDA figures from AAC Holdings press releases. See, "AAC Holdings, Inc. Reports Third Quarter 2014 Results," *Business Wire*, November 5, 2014; "AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2014 Results," *Business Wire*, February 24, 2015; "AAC Holdings, Inc. Reports First Quarter 2015 Results," *Business Wire*, April 29, 2015; "AAC Holdings, Inc. Reports Second Quarter 2015 Results," *Business Wire*, July 29, 2015.

[B] Consensus/street Adjusted EBITDA estimates cited by analysts. See, "AAC-First Look at 3Q14," *Avondale Partners*, November 5, 2014; "Solid End to First Year as a Public Company; Development Pipeline Looks Robust," *William Blair*, February 24, 2015; "Strong Start to the Year; Development Pipeline Should Drive Continued Growth," *William Blair*, April 29, 2015; "Strong Quarter as Company Firing on All Cylinders, But California Charges May Dampen Enthusiasm," *William Blair*, July 29, 2015.

[D] Coffman Event Study Results.

[8] Coffman Event Study Results.

[10] S&P CapIQ Price data.

[12] Coffman Event Study Results.

Exhibit 1c

Disaggregation of AAC Common Stock's Price Movement on 7/30/2015 Based on Earnings Response Coefficients (ERC Methodology)

			Revenue (millions)			Abnormal Price Change	ERC
	Date	Quarterly Period	Actual	Expected	Surprise		
			[A]	[B]	[C]=[A]-[B]	[D]	[E]=[D]/[C]
[1]	11/6/14	Q3 2014	\$36.60	\$30.50	\$6.10	\$1.62	0.27
[2]	2/25/15	Q4 2014	\$37.20	\$35.70	\$1.50	\$4.27	2.85
[3]	4/30/15	Q1 2015	\$42.80	\$38.80	\$4.00	\$4.07	1.02
[4]	7/30/15	Q2 2015	\$53.80	\$44.40	\$9.40	(\$1.43)	

		Average ERC	Median ERC	Min ERC	Max ERC
[5]	ERC Estimate	1.38	1.02	0.27	2.85
[6]	Earnings Surprise on 7/30/15	\$9.40	\$9.40	\$9.40	\$9.40
[7]=[5]*[6]	Expected Abnormal Price Movement due to Earnings Surprise on 7/30/15	\$12.94	\$9.56	\$2.50	\$26.75
[8]	Abnormal Price Movement on 7/30/15	(\$1.43)	(\$1.43)	(\$1.43)	(\$1.43)
[9]=[8]-[7]	Implied Abnormal Price Movement due to Corrective Info on 7/30/15	(\$14.37)	(\$10.99)	(\$3.93)	(\$28.18)
[10]	AAC Common Stock Price on prior trading date	\$39.07	\$39.07	\$39.07	\$39.07
[11]=[9]/[10]	<b>Implied Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-36.8%</b>	<b>-28.1%</b>	<b>-10.1%</b>	<b>-72.1%</b>
[12]	Root Mean Squared Errors (or Standard Deviation of Errors) on 7/30/15	0.03	0.03	0.03	0.03
[13]=[11]/[12]	<b>T-statistic of Abnormal Price Movement (%) due to Corrective Info on 7/30/15</b>	<b>-11.60</b>	<b>-8.87</b>	<b>-3.17</b>	<b>-22.75</b>
[14]	P-value of Abnormal Price Movement due to Corrective Info on 7/30/15	0.00	0.00	0.00	0.00

Notes:

[A] Actual revenue figures from AAC Holdings press releases. See, "AAC Holdings, Inc. Reports Third Quarter 2014 Results," *Business Wire*, November 5, 2014; "AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2014 Results," *Business Wire*, February 24, 2015; "AAC Holdings, Inc. Reports First Quarter 2015 Results," *Business Wire*, April 29, 2015; "AAC Holdings, Inc. Reports Second Quarter 2015 Results," *Business Wire*, July 29, 2015.

[B] Consensus/street revenue estimates cited by analysts. See, "AAC-First Look at 3Q14," *Avondale Partners*, November 5, 2014; "Solid End to First Year as a Public Company; Development Pipeline Looks Robust," *William Blair*, February 24, 2015; "Strong Start to the Year; Development Pipeline Should Drive Continued Growth," *William Blair*, April 29, 2015; "AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength," *Avondale Partners*, July 30, 2015.

[D] Coffman Event Study Results.

[8] Coffman Event Study Results.

[10] S&P CapIQ Price data.

[12] Coffman Event Study Results.

# Appendix A

## Documents Considered

### Court Documents

- Consolidated Class Action Complaint for Violations of the Federal Securities Laws, *Dr. Joseph F. Kasper, v. AAC Holdings, Inc.*, dated February 29, 2016.
- Expert Report of Paul A. Gompers, Ph.D., December 22, 2016.
- Deposition of Paul A. Gompers, Ph.D., January 23, 2017.
- Expert Report of Chad Coffman, CFA, dated October 18, 2016, including all documents referenced and considered.

### SEC Filings/Forms

- AAC Holdings, Inc. 10-K Annual filings submitted to the SEC applicable Class Period:
  - AAC Holdings, Inc., 10-K for the Fiscal Year End December 31, 2014.
  - AAC Holdings, Inc., 10-K for the Fiscal Year End December 31, 2015.
- AAC Holdings, Inc. Form 424(B) filed with the SEC on October 2, 2014.
- AAC Holdings, Inc. 10-Q Quarterly filings submitted to the SEC during the Class Period.
- AAC Holdings, Inc. 8-K Current reports submitted to the SEC during the Class Period.

### Security Data

- Historical data for AAC Holdings, Inc. Common Stock, S&P United States BMI Healthcare Equipment and Services (Subsector) Index and the S&P 500 Total Return Index were obtained from S&P Capital IQ.

### AAC Holdings, Inc. News, Press Releases and Conference Calls

- AAC Holdings, Inc. news headlines and select articles downloaded from Factiva for the Class Period, including, but not limited to:
  - “AAC Drops; President Indicted for Murder in Patient Death,” *Bloomberg*, July 30, 2015.
- AAC Holdings, Inc. earnings conference call transcripts during the Class Period:
  - “AAC Holdings, Inc. FQ3 2014 Earnings Call Transcripts,” *S&P Capital IQ*, November 6, 2014.
  - “AAC Holdings, Inc. FQ4 2014 Earnings Call Transcripts,” *S&P Capital IQ*, February 25, 2015.
  - “AAC Holdings, Inc. FQ1 2015 Earnings Call Transcripts,” *S&P Capital IQ*, April 30, 2015.



- “AAC Holdings, Inc. FQ2 2015 Earnings Call Transcripts,” *S&P Capital IQ*, July 29, 2015.
- AAC Holdings, Inc. press releases:
  - “AAC Holdings, Inc. Reports Third Quarter 2014 Results,” *Business Wire*, November 5, 2014.
  - “AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2014 Results,” *Business Wire*, February 24, 2015.
  - “AAC Holdings, Inc. Reports First Quarter 2015 Results,” *Business Wire*, April 29, 2015.
  - “AAC Holdings, Inc. Reports Second Quarter 2015 Results,” *Business Wire*, July 29, 2015.
  - “AAC Holdings, Inc. Reports Third Quarter 2015 Results,” *Business Wire*, October 27, 2015.
  - “AAC Holdings, Inc. Reports Fourth Quarter and Full Year 2015 Results,” *Business Wire*, February 23, 2016.
  - “AAC Holdings, Inc. Issues Statement on California Department of Justice Actions,” *Business Wire*, July 29, 2015.

#### **AAC Holdings, Inc. Analyst Reports**

- AAC Holdings, Inc. analyst reports supplied by Investext via Thomson Reuters and from Lead Plaintiffs’ Counsel for the period October 2014 to December 2015, including, but not limited to:
  - “Solid End to First Year as a Public Company; Development Pipeline Looks Robust,” *William Blair*, February 24, 2015.
  - “AAC: First Look at 4Q14,” *Avondale Partners, LLC*, February 24, 2015.
  - “Strong Start to the Year; Development Pipeline Should Drive Continued Growth,” *William Blair*, April 29, 2015.
  - “AAC: 2Q Beat & Raise, but Pending Investigation Clouds Strength,” *Avondale Partners*, July 30, 2015.
  - “Strong Quarter as Company Firing on All Cylinders, But California Charges May Dampen Enthusiasm,” *William Blair*, July 29, 2015.
  - “Initiating Coverage With Outperform Rating,” *William Blair*, October 27, 2014.
  - “AAC Holdings - American Addiction Centers,” *Soundview Technology Group*, October 27, 2014.
  - “AAC-Initiating MO; Multi-year Growth Tailwinds Support Premium,” *Avondale Partners*, October 27, 2014.
  - “Very Strong First Quarter Out of the Box; All Key Metrics Well Above Expectations,” *William Blair*, November 5, 2014.
  - “AAC-First Look at 3Q14,” *Avondale Partners*, November 5, 2014.
  - “Strong Execution & LT Growth Supports Higher Multiple,” *Avondale Partners*, November 6, 2014.

- “Announces First Acquisition as Public Company; \$13 Million Purchase of Recovery First,” *William Blair*, December 15, 2014.
- “LT Analysis Poised for Positive Outcomes; Raising PT to \$37,” *Avondale Partners*, January 8, 2015.
- “Morning Meeting Summary,” *Avondale Partners*, January 8, 2015.
- “AAC: Synergistic Acquisition Expands Outpatient; Reiterate MO,” *Avondale Partners*, January 26, 2015.
- “Rating and Forecast Report AAC Holdings”, *ValueEngine*, July 28, 2015.
- “DeNovo Acquisition Adds Capacity in SoCal,” *Avondale Partners*, February 4, 2015.
- “First Look at 4Q14,” *Avondale Partners*, February 24, 2015.
- “Raising PT to \$41 on Strong Growth and Momentum,” *Avondale Partners*, March 4, 2015.
- “Highlights From Recent Travels With Management,” *William Blair*, March 13, 2015.
- “2015 on Strong Footing; Upside Potential. Raising Estimates,” *Avondale Partners*, May 4, 2015.
- “Morning Meeting Summary,” *Avondale Partners*, May 21, 2015.
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